

## **Historic, archived document**

Do not assume content reflects current scientific knowledge, policies, or practices.





# Biotechnology Notes

Volume 8 • Number 4

U.S. Department of Agriculture

April 1995

**Biotechnology Notes**, a compilation of agency activities, news events, and upcoming meetings, is prepared for members of the U.S. Department of Agriculture's (USDA) Committee on Biotechnology in Agriculture (CBA) by USDA's Office of Agricultural Biotechnology (OAB).

## INSIDE USDA

### COMPANIES PETITION APHIS TO DE-REGULATE CORN

Two companies with genetically modified corn products recently petitioned USDA's Animal and Plant Health Inspection Service (APHIS) seeking nonregulated status, meaning their products do not pose a plant pest risk and therefore should not be subject to regulatory oversight. Ciba Seeds, a division of Ciba-Geigy Corporation of Research Triangle Park, NC, requests non-regulated status for its insect-resistant corn called Event 176 Corn. The corn was modified to resist certain insects including the European corn borer. The public has until April 24 to comment on Ciba's petition (Docket No. 95-007-1.)

The second petition was submitted by AgrEvo Company, USA, a Wilmington, DE firm, for Glufosinate Resistant Corn Transformation Events T14 and T25 (Docket No. 95-011-01). The corn was modified to tolerate the herbicide glufosinate. The public has until April 28 to submit any comments on the petition. After both comment periods close, APHIS will review the data submitted by the petitioners, all written comments, and any other information and furnish a response to the companies. APHIS will then publish a notice in the *Federal Register* announcing its decision. To obtain a copy of either petition, please call Kay Peterson at 301-734-7601.

### NEW ISSUE OF *PROBE* PUBLISHED

*Probe*, the newsletter for USDA's plant genome research program, recently published another issue (August 1994-January 1995). This issue reports on maize genetics, FLP crop recombinase and rice genes. It also lists the 105 1994 plant genome grant recipients with titles of their projects. To date, 85 institutions have received National Research Initiative plant genome awards of which \$59 million has been awarded to USDA's Agricultural Research Service. To receive a copy, please call 301-504-6613.

USDA  
NATL. AGRIC. LIBRARY  
1995 MAY 23 A 8:23  
CURRENT SERIAL RECORDS  
ACO/SERIALS BRANCH

## **REGULATORY INFORMATION NOW ON INTERNET**

USDA's APHIS provides via Internet information on regulations, proposed rules, public notices, data from applications for field testing, a user's guide for applying for permits, personnel directories, and links to other World Wide Web sites. To access the Home Page, connect your Web browser (e.g., Mosaic) to:

"ftp://ftp.aphis.ag.gov/pub/bbep/home.htm" The files are also available by anonymous ftp from "ftp.aphis.ag.gov/pub/bbep"

This directory is provided by APHIS' biotechnology permits department and is available to the general public. For additional information, contact Keith Reding at 301-734-8365.

The May issue of *Biotechnology Notes* will highlight the biomonitoring database implemented by USDA's National Biotechnology Impact Assessment Program. This is a searchable system containing information on environmental assessments and other topics.

## **GUIDELINES REPRINTED; NEW E-MAIL ADDRESS FOR OAB**

The December 3-4, 1991 minutes of USDA's Agricultural Biotechnology Research Advisory Committee (ABRAC) have been reprinted and are available free of charge. These minutes contain the "Guidelines for Research Involving Planned Introduction into the Environment of Genetically Modified Organisms." To receive a copy, please send your request by fax to 202-720-5336.

USDA's Office of Agricultural Biotechnology (OAB) has a new e-mail address: masner@reeusda.gov

## **NEWS AROUND THE NATION (AND THE WORLD)**

### **BIOTECHNOLOGY ON CAMPUS**

*This is the third in a series of articles profiling agricultural biotechnology programs at U.S. colleges and universities. This month we visit Alabama Agricultural and Mechanical University in Normal, Alabama.*

Alabama A&M University's Center for Molecular Biology is unique in two ways: it thrives at an 1890 institution and, second, it supports the only doctoral program in plant sciences at an historically Black college and university. There are eight research scientists affiliated



with the Center, and they are working on such topics as the molecular basis of aluminum tolerance in soybean, study of genes regulating fusiform rust in pines, pine somatic embryogenesis and transformation, molecular markers in cotton, and high molecular weight glutenin protein gene transformation in oat. Currently, there are 12 graduate students affiliated with the Center.

The university was established as the Huntsville Normal School in 1875 and achieved land grant status in 1890. The first degree program in agriculture was offered a year later. In 1976 it offered a B.S. degree in Forest Operations Management, the only forestry degree program at an historically Black land grant institution. The Center for Molecular Biology focuses on plant and microbial molecular genetics, plant cell and tissue culture, plant transformation, and characterization of gene products. To learn more about the Center, please call Govind Sharma, Director, at 205-51-5462; Fax: 205-851-5429.

*NEXT MONTH: The University of Maryland's Center for Agricultural Biotechnology*

### **AUSTRIA PLANS FIELD TRIALS**

The Austrian government plans to release two genetically engineered crops including potatoes containing a gene coding for the lytic peptide cecropin which should produce enhanced resistance against pathogenic bacteria and fungi. The other field test will be with modified apricot trees containing a viral protein gene which should result in resistance against plum-pox virus. For more details, please call the Austrian Research Center Department of Biotechnology at 43-2254-780-3524.

In other news from Austria, a law on genetic engineering was adopted by that country's parliament last summer and went into effect January 1, 1995. The law implements two European Union directives and also covers contained use of transgenic plants and animals.

### **OECD WORKING GROUP SETS PRIORITIES**

The second meeting of the Organization for Economic Cooperation and Development (OECD) Working Party on biotechnology of the Committee on Science and Technology Policy met in Paris, France last February 1-2. The group took steps to define its methods of work and set priorities for future projects. The meeting focused on four subjects: intellectual property rights, bioremediation, health, and agro-food biotechnology. Concerning intellectual property, an ad-hoc sub-group presented a draft questionnaire to be used in a Swiss-initiated study on intellectual property policy regarding technology transfer issues and access to genetic resources. The questionnaire was approved with minor changes. After further review, the results will be presented at the third plenary session of the Working Party.

## **NEW BIOTECH CENTER LAUNCHED**

The University of Minnesota recently announced the establishment of the Food Animal Biotechnology Center (FABCenter) in St. Paul, MN. The center promotes an interdisciplinary approach to research and education. Faculty is drawn mainly from the University Colleges of Agriculture, Biological Sciences, Natural Resources, Veterinary Medicine, and Institute of Human Genetics. The mission of the Center is to develop competitive, highly integrated food production systems that provide safe, economical food products through the use of molecular tools and methods. The founding Director is Lawrence Schook and the phone number is 612-624-7279; Fax: 612-624-7284; E-mail: fabctr.maroon.umn.tc.edu

## **SHEEP DATABASE COMING**

SheepBase, an informational database that includes mapped genetic loci in sheep, will soon be available on-line through Internet and eventually the World Wide Web, according to NAGRP (National Animal Genome Research Program) News, Vol. 2, Number 1, 1995. An international editorial committee will make policy decisions on mapping data held in the database, compile the integrated genetic map, and review new data. To subscribe to NAGRP News, please write to Harris Lewin, 206 PABL, 1201 W. Gregory Dr., University of Illinois, Urbana, IL 61801.

## **CALLING ALL PIG MAPPERS**

If you are one of the dozens of scientists around the world busily mapping the pig genome, then maybe you should subscribe to the *Pig Genome Update*, a bimonthly newsletter that is mailed in hard copy and sent out electronically. For details, send a message to: [angenmap@iastate.edu](mailto:angenmap@iastate.edu)

## **ALL ABOUT PCR**

If your polymerase chain reaction (PCR) skills have gotten rusty, now may be the time to register for a training class sponsored by Biotechnology Training Programs of Gilmanton Iron Works, NH. Classes in PCR and other techniques are being offered from March through July at universities around the country. For more details, please call 1-800-821-4861; Fax: 603-267-1993; E-mail: [biotraining@delphi.com](mailto:biotraining@delphi.com). (PCR is a laboratory technique used to multiply DNA molecules.)



## **SPECIAL ISSUE OF NEWSLETTER**

*Wisconsin BioIssues*, a publication of the University of Wisconsin Biotechnology Center, devotes its January-February 1995 issue to field trials and biosafety. Included are articles on the role of government, industry, public opinion, USDA's Agricultural Biotechnology Research Advisory Committee, field trials, risk, benefits, and commercialization. To request a copy, please call 608-262-2604 or send an e-mail message to: [ddwardle@maccc.wisc.edu](mailto:ddwardle@maccc.wisc.edu)

## **BACK TO LILLEHAMMER**

Lillehammer, Norway will be the site of several biotech meetings in 1996. The 42nd International Congress of Meat Science and Technology will take place September 2-6. Current areas of world-wide research relevant to the central theme, "Meat for the Consumer," will be targeted through invited lectures, posters, and workshops.

During the preceding week, Lillehammer is the venue for two other closely related meetings, namely the 47th Annual Meeting of the European Association for Animal Production from August 26-29, and a one-day seminar on Saturday August 31 on Biotechnology in Animal Production and Meat Processing. For more details, please write to the Scientific Secretariat 42nd ICoMST, MATFORSK - Norwegian Food Research Institute, Osloveien 1, N-1430 Aas, Norway; or call 47-649-70-100; Fax: 47-649-70-333.

## **CANADIAN GUIDELINES PUBLISHED**

Canada's Plant Biotechnology Office of Agriculture and Agri-Food Canada recently issued regulatory guidelines for environmental assessments for the release of plants with novel traits, according to the February issue of *The AgBiotech Bulletin*. Once an authorization is given, these plants may be grown "without restrictions of reproductive isolation, post-harvest land use, and disposal of seed." For more information, please call 613-952-8000; Fax: 613-941-9421.

## **IN CASE YOU WEREN'T THERE**

■ **The Congressional Biotechnology Caucus** and the Senate Agriculture Committee hosted an informal overview and discussion by members of the National Agricultural Biotechnology Council (NABC), March 1, in Washington, DC. Ralph Hardy, President and CEO of the Boyce Thompson Institute, said although ag biotechnology has huge potential to improve productivity, the industry has been slow in meeting its goals. He said consumer acceptance isn't a major problem, but he believes more needs to be done to

explain biotech to the public to help increase the public's "comfort" level with new foods. He said he hoped the regulatory approval process will speed up, especially as it relates to the Environmental Protection Agency.

The NABC was formed in 1988. Current membership includes 21 institutions in the United States and Canada. Its main goal is to provide an open forum for persons with different interests to come together and evaluate the potential impacts of ag biotechnology. A synopsis of the views expressed at its sixth annual meeting, "Biotechnology and the Public Good," may be obtained by writing to NABC/BTI, 159 Biotechnology Bldg, Cornell University, Ithaca, NY 14853-2703.

■ **A 2-day international meeting** on biosafety and the environmental impact of deploying genetically engineered sorghum took place February 26 through March 3 in Nairobi, Kenya. Sorghum is the most important food crop in the third world second only to rice and is consumed by more than 500 million people.

Participants recommended that the herbicide resistance gene should not be engineered into sorghum, and that integrated pest management programs be carefully examined when insect and other pest resistance genes are deployed in sorghum. The proceedings of the entire workshop will be published as a special issue of the *Africa Crop Science Journal*. For more details, please contact Sivramiah Shantharam, USDA/APHIS, at 301-734-4882; Fax: 301-734-8669; E-mail: A341SShantha@attmail.com or write to K.V. Raman, Director, AmeriCenter, ISAAA, Department of Plant Breeding and Biometry, Cornell University, 260 Emerson Hall, Cornell University, Ithaca, NY 14853-1902.

## NEW PUBLICATIONS

■ **NABC Report 6: *Agricultural Biotechnology and the Public Good***. Edited by J. F. MacDonald. Published by the National Agricultural Biotechnology Council. Ithaca, New York. 1994. Information about ordering copies may be addressed to NABC/BTI, 159 Biotechnology Bldg., Cornell University, Ithaca, NY 14853-2703.

## UPCOMING MEETINGS

**April 4-5:** Great Lakes Biotechnology Conference. Dearborn, MI. Sponsored by the Michigan Biotechnology Institute, MERRA, and the Michigan Biotechnology Association.

**April 10:** Consumer Issues in Biotechnology: Genetically Engineered Foods. Atlanta, GA. A public information symposium organized by Georgetown University and USDA's OAB. For more information, please call Robin Woo at 202-687-6349.



**April 11:** "Patent Issues in Biotechnology." Washington, DC. Sponsored by the Biotechnology Industry Organization, Capital Region. For details, please call 202-857-0244, ext. 231.

---

**May 14-17:** "Biotechnology's Role in the Genetic Improvement of Farm Animals." Beltsville, MD. Sponsored by USDA's Agricultural Research Service. For more details, please call Virginia Hupfer at 301-504-6108; Fax: 301-504-6357.

**May 17-18:** "Applications of Cellular and Molecular Biology to Animal Science Research." Beltsville, MD. Annual meeting sponsored by the North Central Region-150 of CSREES Research Directors. For details, please call Nancy Aldridge at 317-494-8362; E-mail: [nma@aes.purdue.edu](mailto:nma@aes.purdue.edu)

**May 20-24:** 1995 Congress on In Vitro Biology: "Interplay of Cells with their Environment." Denver, CO. Sponsored by the Society for In Vitro Biology. Please call 410-992-0946; Fax: 410-992-0949.

**May 20-25:** BIO's Ninth International Meeting and Exhibition. San Francisco, CA. Sponsored by the Biotechnology Industry Organization. For details please call 202-857-0244; Fax: 202-331-8132.

**May 24-27:** NABC 7: Genes for the Future: Discovery, Ownership, Access. Columbia, Missouri. Sponsored by the National Agricultural Biotechnology Council. For more information, please call Carrol Lewis at 314-882-7488; Fax: 314-882-0388.

---

**June 6-8:** The 7th Symposium on Environmental Releases of Biotechnology Products: Risk Assessment Methods and Research Progress. Pensacola, FL. Co-sponsored by EPA, USDA, and Environment Canada. Meeting free of charge. For more details, please call James Harvey at 904-934-9237; Fax: 904-934-9388.

**June 10-13:** "Value-Added Cereals Through Biotechnology" Saskatoon, Saskatchewan, Canada. For details please call Rosemarie Gallays at 306-975-5571; Fax: 306-975-4839.

**June 19-30:** Advances in Molecular Genetics. Madison, WI. An international course in recombinant DNA. Co-sponsored by BioPharmaceutical Technology Center Institute, and the University of Wisconsin. For details, please call 608-273-9737; Fax: 608-273-6992; E-mail: [kborgh@promega.com](mailto:kborgh@promega.com)

**June 23:** Food Animal Biotechnology Center (FABCenter) Symposium '95. St. Paul, MN. For details, please call 612-624-7279; Fax: 612-624-7284.

**June 23-26:** "8th International Symposium on Staphylococci and Staphylococcal Infections." Aix-Les-Bains, France. For details, please call 33-1-4568-8179; Fax: 33-1-45-6746-98.

<> <> <> <> <> <> <> <> <> <> <> <> <> <> <> <> <> <> <> <>

**Biotechnology Notes** is prepared by Marti Asner, OAB/CSREES/USDA. Any comments or suggestions may be sent to USDA/OAB, Ag Box 0904, Room 3868-South, 14th and Independence Ave., S.W., Washington, DC 20250-0904. Telephone: 202-720-5853; Fax: 202-720-5336; E-mail: [masner@reeusda.gov](mailto:masner@reeusda.gov)

*USDA prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.)*

*Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact the USDA Office of Communications at 202-720-5881 (voice) or 202-720-7808 (TDD).*

*To file a complaint, write the Secretary of Agriculture, USDA, Washington, DC 20250 or call 202-720-7327 (voice) or 202-720-1127 (TDD). USDA is an equal employment opportunity employer.*